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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/530,758	10/26/2001	Yoseph Koltunov	106153	3296

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EXAMINER
VERBITSKY, GAIL KAPLAN

ART UNIT	PAPER NUMBER
2859	

DATE MAILED: 05/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/530,758	KOLTUNOV ET AL.	
	Examiner	Art Unit	
	Gail Verbitsky	2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will; by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 March 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-16,18,19 and 27* is/are allowed.

6)☒ Claim(s) *17,20-26,28,30 and 33* is/are rejected.

7)☒ Claim(s) *31 and 32* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 17, 20-25, 30 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Sadovnik et al. (U.S. 5497430) [hereinafter Sadovnik] in view of hart et al. (U.S. 4916745) [hereinafter Hart].

Sadovnik discloses in Fig. 2 a device comprising means (camera) for acquiring and recording electromagnetic data of electromagnetic (infrared spectra) radiation emitted from an object face (selected region), the means has at least one sensor/ camera 20. The device has a storage/ memory means coupled to said acquiring means to compare the acquired image to the one in the memory. The device also has a processor coupled to the memory for making a descriptive map/ image of the object/ face, the descriptive map is constituted by pixels. The processor has/ coupled to a pattern recognition processor means (feature extractor/ identificator) which inherently includes means 9additional geometrical means) determining shape of the object/ face. The device/ computer/ network also has a quality factor evaluation means providing an algorithm sensitive to small variation in face intensity distribution (col. 7, lines 55-65) algorithm optimization means which inherently performs an algorithm optimization (col. 8, lines 10-11). Since the feature extractor can extract different features including a

spatial content, it would imply, that there is a means for determining a geometry of the object (geometrical classification means). It is inherent that the pattern recognition means is capable of automatic detection and recognition of the objects according to an algorithm. It is also inherent that the processor is capable of deriving an image/ descriptive map.

Sadovnik does not explicitly disclose the particular way of classifying the image/ pixels/ processing image described by pixels to derive the descriptive map, as stated in claim 17.

Hart teaches a use of a known statistical method of image processing using a Gauss distribution (polynomial expansion) and Bayes rule.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the known statistical approach/ classification, as taught by Hart, so as to analyze the image, acquired by the device disclosed by Sadovnik, so as to minimize the costs by using a known method.

3. Claims 26, 28, 31 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Sadovnik and Hart as applied to claims 17, 20-25, 30 above, and further in view of Cramer et al. (U.S. 6000844) [hereinafter Cramer].

Sadovnik and disclose the device as stated above in paragraph 2.

They do not state that means for acquiring and recording is on a movable platform.

Cramer discloses a device for acquiring an electromagnetic radiation emitted from an object, the device moves relative to the object/ positioned on a movable platform. Cramer also teaches to apply heating and cooling and acquire an image of the object by detecting thermophysical inequality/ defects/ inhomogeneous regions.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Sadovnik and Hart, so as to place means for image acquire means (camera) onto a movable platform, as taught by Cramer, in order to easily move the device from one object to another, and also around an object, so as to better assess the objects' features.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use heating and/ or cooling of the object, as taught by Cramer, in order to obtain a response and acquire a thermal map by the objects response to temperature change.

4. Claim 33 is finally rejected under 35 U.S.C. 103(a) as being unpatentable over Sadovnik and Hart as applied to claims 17, 20-25, 30 above, and further in view of Simpson et al. (U.S. 6485625) [hereinafter Simpson].

Sadovnik and Hart disclose the device as stated above in paragraph 2.

They do not explicitly teach a rotatable optical filter, as stated in claim 33.

Simpson states that it is known in the art to use rotatable (optical) filters to select spectral ranges for a pattern recognition technique.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to add an optical rotatable filter, as taught by Simpson, to the device disclosed by Sadovnik and Hart, so as to allow the device to use different spectra for a single detection means, in order to improve accuracy and decrease manufacturing costs of the device.

Allowable Subject Matter

5. Claims 31-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 1-16, 18, 27, 29 are allowed.

Response to Arguments

7. Applicant's arguments with respect to claim 17, 20-26, 28, 30, 33 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices and methods.

Any inquiry concerning this communication should be directed to the Examiner Verbitsky who can be reached at (571) 272-2253 Monday through Friday 8:00 to 4:00 ET.

GKV

Gail Verbitsky
Primary Patent Examiner, TC 2800

May 14, 2004